

REMARKS

The Examiner's Action of May 3, 2002 has been received and its contents carefully considered. Reconsideration is respectfully requested in view of the following comments.

Claims 1-8 are currently pending in the instant application.

I. Allowable Subject Matter

Applicants would like to thank the Examiner for the indication of allowability of the subject matter in claims 3, 4, and 8. In view of the argued allowability of the rejected claims over the prior art however, claims 3, 4 and 8, which depend from rejected independent claim 1, are being retained as dependent claims herein.

II. Rejection under 35 USC 103(a)

A. Klopfleisch et al. in view of Greenwood et al.:

Claims 1-2 and 8 have been rejected under 35 USC 103(a) as being unpatentable over Klopfleisch et al. in view of Greenwood et al. Reconsideration is respectfully requested in view of the following comments.

Neither of Klopfleisch et al. or Greenwood et al., either alone or in combination, succeed in establishing a *prima facie* case of obviousness.

"To establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference(s) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the

prior art, and must not be based on the Applicant's disclosure. *See* MPEP § 2142; *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991).

Klopfleisch et al. pertain to a wire guidance system for a materials handling vehicle which detects an alternating signal carried by a buried wire. Specifically, it relates to a method and apparatus for determining the position of a guided vehicle relative to a buried wire carrying an alternating current signal. This is done by using two sets of four individual sensors. First, coil voltage is correlated to distance in the laboratory by measuring and recording the individual coil outputs at various distances and recording the results in a look-up table. Next, the sensor coils are calibrated. Here, where there is a change in circumstances warranting calibration, the vehicle is moved in a path causing each coil to pass directly over the wire and to record the peak voltage observed. The maximum voltage recorded is divided into a number that represents the maximum expected output of the coil, or its gain factor, and the resulting number for that coil is stored in electronic memory for later use. The guidance electronics are now ready for use. In use, the electronics will sense the distance of the vehicle from the buried wire by reading the voltage output of each coil individually. The coil voltage is multiplied by the gain factor for each coil to obtain an actual distance measurement for each coil. From the distance measurements from individual coils, the distance of a predetermined point on the vehicle, and the angle of the vehicle's centerline relative to the wire is also calculated.

The Examiner's Action states that Klopfleisch et al. do not "explicitly mention" the steps of "determining" and "correcting" as recited in independent claim 1. The Examiner has proposed the combination of Klopfleisch et al. with Greenwood et al. to overcome the above deficiency in Klopfleisch et al.

First, not only do Klopfleisch et al. fail to disclose or suggest the steps of "determining" and "correcting" recited in independent claim 1 as identified by the Examiner, Klopfleisch et al. further fail to disclose or even suggest the step of "sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-stationary, taking into

account a motion of the vehicle,” as further recited in independent claim 1. Nothing in the system of Klopfleisch et al. pertains to sensing motion or a lack thereof. Klopfleisch et al. are concerned with measuring distances and positions, rather than an interpretation that would involve a determination as the quality of being either stationary or quasi-stationary. This feature is simply missing from Klopfleisch et al.

The Examiner has proposed a combination of Klopfleisch et al. and Greenwood et al. to overcome the deficiencies of Greenwood et al. identified by the Examiner. However, as stated above, not only does Klopfleisch et al. fail to disclose or suggest the steps of “determining” and “correcting” as recited in independent claim 1, Klopfleisch et al. further fail to disclose or suggest the step of “sending” as recited in independent claim 1. Greenwood et al. do nothing to overcome the deficiencies of Klopfleisch et al. stated above.

Greenwood et al. pertain to a method of minimizing positioning errors of large machines typically arising from thermal expansion and mechanical misalignment between the axes of the machine. Greenwood et al. use a static optical machine control (SOMaC) uses a coordinate measurement machine software to locate critical features associated with the part during system calibration. This establishes a part frame of reference to which the machine adjusts, thus eliminating the need for accurate part fixturing to establish a true position reference. The actual location of a part and its features is established by measuring the location of the features and comparing the measured location with the location established in a digital definition or digital dataset representation of the part. The comparison is used to calculate the actual position of the part, and also for calculating a “scale factor” for adjusting machine commands to compensate for differences between the actual part and the digital dataset representation. This “autoscale” feature alters the NC Media derived from the engineering specification of the part to accommodate physical changes to the part that occur during machining, such as changes in the size of the part arising from changes in the factory temperature. For example, the digital dataset definition of the position of part features is adjusted to reflect the expansion or contraction of the

part. "Autoscale" in Greenwood et al. is a batch or interval adjustment rather than a continuous resealing, which reduces the processing required.

First, there exists no motivation to combine the teachings of Klopfleisch et al. and Greenwood et al. The only suggestion for the combination comes from Applicant's own specification. In this respect, the Examiner is using impermissible hindsight.

Klopfleisch et al. pertain to a sensor system that, once calibrated, stays calibrated until there is a reason to recalibrate, which occurs where there is a reason why the output of the coils may be affected. Klopfleisch et al. Col. 1, lines 59-66. Klopfleisch et al. are concerned about determining a position of a guided vehicle with respect to a buried wire. On the other hand, Greenwood et al. are concerned about correctly positioning a machine tool with respect to parts to be machined. Greenwood et al. periodically compensate for any errors in the positioning of the machine tool with respect to the parts to be machined by using the "autoscale" feature described above. There is nothing in Klopfleisch et al. that discloses or suggests the desirability of a periodic adjustment or calibration of the guided vehicle therein. The circumstances in Klopfleisch et al. that are disclosed as warranting recalibration have to do with one time events that are readily discernible and measurable, such as the initial installation of a vehicle in an existing warehouse, changes in the vehicle electronics components, changes in the buried wire power source, or other similar changes that might affect coil output. Klopfleisch et al. Col. 1, lines 59-66. There is no indication of Klopfleisch et al. of any periodically changing circumstances that would warrant "autoscaling" as disclosed in Greenwood et al. Thus, it is not seen why a person of ordinary skill would have been motivated to combine the two references in the first instance. As noted above, the only suggestion for the combination comes from Applicant's own disclosure.

Second, assuming arguendo that Klopfleisch et al. and Greenwood et al. were combinable as suggested by the Examiner, that combination would still be missing the step of "sending to a calibration unit data that is interpreted as representing the object as one of stationary and quasi-

stationary, taking into account a motion of the vehicle,” as recited in independent claim 1.

Similar to Klopfleisch et al., Greenwood et al. have nothing to do with an interpretation of a motion or lack of motion of an object, and therefore cannot be disclosing or even suggesting an interpretation of an object as “stationary” or “quasi-stationary,” contrary to the instant invention as recited in independent claim 1.

Accordingly, it is submitted that independent claim 1 is patentable over the cited combination of references. In addition, dependent claims 2, 5, 6 and 8 are likewise patentable over the cited combination of references for being dependent from independent claim 1, and further for the particular additional features that they recite.

B. Klopfleisch et al. in view of Greenwood et al. , further in view of Beliveau et al. and Lemelson et al.

Claims 5 and 6 have been rejected under 35 USC 103(a) as being unpatentable over Klopfleisch et al. in view of Greenwood et al. and further in view of Beliveau et al. and Lemelson et al. Reconsideration is respectfully requested.

Claims 5 and 6 depend from independent claim 1. Claims 5 and 6 are patentable over the cited combination of references for being dependent from independent claim 1, as explained in further detail in Section A. above. Beliveau et al. and Lemelson et al. do nothing to remedy the deficiencies of Klopfleisch et al. in view of Greenwood et al. as discussed above, and, therefore, the same arguments presented above with respect to independent claim 1 apply likewise to dependent claims 5 and 6.

V. CONCLUSION


In view of the foregoing, it is submitted that the application is now in condition for allowance. Reconsideration, withdrawal of all grounds of rejection and issuance of a Notice of Allowance are solicited.

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The Examiner is invited to contact the undersigned at (212) 908-6443 to discuss any matter concerning this application.

Respectfully submitted,

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